Notebook Series -- Notebooks by Experimenters Other Than Edison
Chemical Experiments -- L. F. Ott Books
Notebook N-14-11-19

This notebook was used by Ludwig F. (Louis) Ott during November-December 1914 for notes on various chemical experiments. Most of the entries pertain to storage batteries and nickel hydrate for battery tubes. One entry describes a polishing compound for records. Numerous pages of loose notes, including some by Edison, have been inserted into the book. One loose item is dated December 22, 1919. The front cover is labeled by Edison, "Not very Important." The pages are unnumbered. Approximately 45 pages have been used.

Plate # 1

3½/1000 Steel perforated with 10"

#0 hand mills. moist with 21% K.O.H.
then put on Nickel hydrate and
pressed in screw press

put on charge at 5 mil. amp. 10 minutes
on 1.33 off 1.33 Discharged at 5 mill amps
Discharged in 10 seconds

put on charge for 20 minutes.

Discharged in 10 seconds
Hydrate washed almost all off

Plate 1½" long ½" wide

1.35 1.55

Plate #2

4/1000 Pure Sheet Nickel Perforated with 10 # 0 hand filed moist with 21% KOH then put on Nickel hydrate and then pressed in Screw press

Put on charge at 5 Milli amps 10 minutes

Discharged 5 Milli amps

Discharged in 13 Seconds

Hydrate washed almost all off

Plate $1\frac{7}{8}$" long $\frac{1}{2}$" wide

Plate # 3

50 mesh brass screen moist with 21% KOH.
Pressed in screw press

Charged at 5 mill amps 10 minutes.

Discharged at 5 mill amps
Discharged in 19 Seconds

Hydrate washed almost all out

Screen 2" Long $\frac{3}{4}$" wide

Plate #4

90 mesh brass screen moist with 2% K.O.H.
pressed in screw press.

Charged at 8 mill amps 10 minutes

Discharged at 8 mill amps

Discharged in 25 Seconds

Hydrate washed almost all out

Screen 18" long Hydrate

#5 11/19/14

Flat bracket made of grid stock

pressed together moist at 350 lbs in hydraulic press

Charged at 5 Mill amps 16 minutes

Discharged at 5 mill amps

Discharged in $3\frac{1}{4}$ minutes

medium perforated Stock Burs ground off

11/23/14

6

Hydrate ground fine
Fine separated Stock has not ground off
one Square inch Surface pressed in Hydraulic
press at 300 lbs on 12" ram.
Made regular [illegible] thickness of pocket
.022 300 [illegible] # 731
[illegible]

Charged at 25 1 Hour
Discharged at 50 m.a. 25 min 140 m.a. 5 min
Charged at 50 " " 20 "
Discharged at 100 " " 3 " 60 m.a. 5 min
Charged at 50 " " 30 "
Discharged " 100 " " 3½ " 70 m.a. 5 min
Charged " 25 " " 1 Hour
Discharged " 100 " " 4½ min 85 m.a. [illegible]
Charged " 25 " " 1 Hour
Discharge " 200 " " 1 min
Charged " 25 " " 1 Hour
Discharged 300 " " ½ min
Charged at 25 " " 1 Hour
Discharged at 200 m.a. 1 min
Charged at 25. " " 1 hour
Discharged " 200 m.a. 1¼ min

This was formed between two steel plates

C117

Quite little Sediment in bottom of glass

12/1/14.

#7

Nickel Hydrate #

pressed moist with rubber pad [illegible] at 200 lbs on 12" ram or 52,020 lbs [illegible] inch of Surface. fine fresh made stock [illegible] ground off

Weight of [illegible]

" Nickel Hydrate

thickness .1022. Hydrate ground fine

Nickel [illegible]

Charged	10 m a	1½ Hour
Discharged	15 " "	9 minutes
Charged	15 " "	1 Hour
Discharged	25 " "	5½ minutes
Charged	25 " "	1 Hour
Discharged	50 " "	2½ minutes
Charged	25 " "	1 Hour
Discharged	100 " "	1 minute
Charged	25 " "	1 Hour
Discharged	150 " "	½ minute
Charged	25 " "	1 Hour
Discharged	200 " "	20 Seconds
Charged	25 " "	1½ Hour
Discharged	200 " "	20 Seconds

Little Sediment in bottom of glass

#8 12/1/14

Ni Hydrate #731

Ground moist well [illegible] 150 lbs on 12" ram or 16,965 lb for 2 inch of surface fine fractured stock [illegible]

Thickness [illegible] 7 [illegible]

" " Ni Hydrate [illegible] " "

Thickness 1022 Hydrate ground fine

opening [illegible]

Charged	10	m.a.	1½ Hour
Discharged	15	" "	7 minutes
Charged	15	" "	1 Hour
Discharged	25	" "	4½ minutes
Charged	25	" "	1 Hour
Discharged	50	" "	2 minutes
Charged	25	" "	1 Hour
Discharged	100	" "	1 minute
Charged	25	" "	1 Hour
Discharged	150	" "	½ minute
Charged	25	" "	1 Hour
Discharged	200	" "	25 Seconds
Charged	25	" "	1½ Hour
Discharged	200	" "	20 Seconds
Charged	25	" "	1 Hour
Discharged	200	" "	20 Seconds

#9 Ni Hydrate #781 12/2/14

Tins perforated [illegible]

Tins inside weight of [illegible] grams

weight of Ni Hydrate .500 grams moist pressed

Thickness of [illegible] .021 Total weight 1.800 grams

Pressed at 150 lbs on 12" ram or 16.965 lbs

[illegible] 50 [illegible] without [illegible]

Charged	10	m. a.	15 Hours
Discharged	10	" "	1 Hour 19 min
Charged	15	" "	1 Hour
Discharged	25	" "	27 min
Charged	25	" "	1 Hour
Discharged	50	" "	12 min
Charged	25	" "	1 Hour
Discharged	100	" "	5 min
Charged	25	" "	1 Hour
Discharged	150	" "	3 min
Charged	25	" "	1 Hour
Discharged	200	" "	1 min 50 seconds

Regular Solution Hydrate ground fine

Very little sediment in bottom of glass

#10 Ni Hydrate #731 12/2/14

Fine perforated steel Burs not ground off
Burs outside weight of pocket 1.320 grms
weight of Ni Hydrate .500 grms moist pressed
thickness of pocket .026 Total weight 1.870 grms
Pressed at 150 lbs on 12" ram or 16.965 lbs
per □ inch Surface pressed with water pad

Charged	10	m.a.		15 Hours
Discharged	10	"	"	1½ Hour
Charged	15	"	"	1 Hour
Discharged	25	"	"	27 min
Charged	25	"	"	1 Hour
Discharged	50	"	"	12½ min
Charged	25	"	"	1 Hour
Discharged	100	"	"	5 min
Charged	25	"	"	1 Hour
Discharged	150	"	"	3 min
Charged	25	"	"	1 Hour
Discharged	200			1½ min

Regular Solution Hydrate ground fine

Very little sediment in bottom of glass

#11 Ni Hydrate # 1256 12/3/14

Hydrate ground fine

Fine perforated stock Buro not ground off

Buro inside weight of pocket 1.330

weight of Ni Hydrate .500 grams

Thickness of pocket .022 pressed moist

Pressed at 150 lb on 12" ram or 16.965 lbs

per □ in Surface pressed with rubber pad

Charged	10	m. a.	14. Hours
Discharged	15	" "	35. min
Charged	15	" "	1. Hour
Discharged	25	" "	20. min
Charged	25	" "	1. Hour
Discharged	50	" "	9. min
Charged	25	" "	1. Hour
Discharged	100	" "	$3\frac{3}{4}$. min
Charged	25	" "	1. Hour
Discharged	150	" "	2. min
Charged	25	" "	1 Hour
Discharged	200	" "	$1\frac{1}{4}$ min

Regular Solution

Very little Sediment in bottom glass

12 Ni Hydrate #1256 12/3/14

Hydrate ground fine

Fine perforated stock Burs not ground off
Burs outside weight of pocket 1.310 grms
Weight of Ni Hydrate .500 gram
Thickness of pocket .027 pressed moist
Pressed at 150 lbs 12" ram or 16.965 lbs
per □ in Surface pressed with rubber pad

Charged	10	m. a.	14.	Hours
Discharged	15	" "	23.	min
Charged	15	" "	1.	Hour
Discharged	25	" "	15.	min
Charged	25	" "	1.	Hour
Discharged	50	" "	8.	min
Charged	25	" "	1.	Hour
Discharged	100	" "	2 1/2	min
Charged	25	" "	1.	Hour
Discharged	150	" "	1 3/4.	min
Charged	25	" "	1	Hour
Discharged	200	" "	1 1/4	min

Regular Solution

#13 Ni Hydrate # 731 12/4/14

Hydrate ground fine

Fine perforated stock Burs not ground off

Burs outside weight of pocket 1.320 grams

weight of Ni Hydrate 1. gram

Thickness of pocket .036" dry pressed

Pressed at 150 lbs on 12" ram or 16.965 lbs

per □ in of Surface pressed with rubber pad

pocket swelled to .046

Charged	15	m.a.	14. Hours
Discharged	15	" "	2. Hours. 17. min
Charged	15	" "	1. Hour
Discharged	25	" "	41. min
Charged	25	" "	1. Hour
Discharged	50	" "	28. min
Charged	25	" "	1. Hour
Discharged	100	" "	12¼ min
Charged	25	" "	1. Hour
Discharged	150	" "	7½. min
Charged	25	" "	1. Hour
Discharged	200	" "	5 min 10 Seconds

Regular Solution

#14 Ni Hydrate # 731 12/4/14

Hydrate ground fine

Fine perforated stock Burs not ground off
Burs outside weight of pocket 1,330 grams
weight Ni Hydrate 1. gram
Thickness of pocket .037 pressed moist
Pressed at 150 lbs on 12" ram or 16.965 lbs
per □ in Surface pressed with rubber pad
pocket swelled to .046

Charged	15	M.A.	14 Hours
Discharged	15	" "	1. Hour 5 min
Charged	15	" "	1. Hour
Discharged	25	"	39 min
Charged	25	" "	1. Hour
Discharged	50	" "	24 min
Charged	25	" "	1. Hour
Discharged	100	" "	10½ min
Charged	25	" "	1 Hour
Discharged	150	" "	6¼ min
Charged	25	" "	1 Hour
Discharged	200	" "	4 min 10 Seconds

Regular Solution

#15 Ni Hydrate #731 12/7/14

Hydrate ground fine

Fine perforated stock Burs not ground off
Burs outside weight of pocket 1.320 grms
weight of Ni Hydrate 1 gram dry pressed
Thickness of pocket .036
Pressed at 150 lbs on 12" ram or 16.965 lbs
per □ Surface pressed with rubber pad
Run in 21% K.O.H. 2 grms Lithia per 100 c.c.

Charged	25	m.a.	14 Hours
Discharged	25	" "	41 min
Charged	25	" "	1. Hour
Discharged	50	" "	19. min
Charged	25	" "	1. Hour
Discharged	100	" "	8. min
Charged	25	" "	1. Hour
Discharged	150	" "	4½. min
Charged	25	" "	1. Hour
Discharged	200	" "	3. min
Charged	25	" "	1. Hour
Discharged	200	" "	3¼ min

C30

16 Ni Hydrate #731 12/7/14

Hydrate ground fine

Fine perforated stock Bars not ground 96

Bars outside weight of pocket 1.340

Weight of Ni Hydrate 1 gram pressed moist

Thickness of pocket

Pressed at 150 lbs on 12" ram or 16.965 lbs per □ in surface pressed with rubber pad

Run in 21% K.O.H. 2 gms Litha per 100. C.C.

Charged	25	m.a.	14 Hours
Discharged	25	" "	31 min
Charged	25	" "	1. Hour
Discharged	50	" "	13. min
Charged	25	" "	1. Hour
Discharged	100	" "	5. min
Charged	25	" "	1. Hour
Discharged	150	" "	3. min
Charged	25	" "	1. Hour
Discharged	200	" "	2. min
Charged	25	" "	1. Hour
Discharged	200	" "	2. min

#17 Ni Hydrate #1256

Nine perforated stock Burs not ground off
Burs outside weight pocket 1.310 grams
weight of Ni Hydrate 1 gram dry pressed
Thickness of pocket .036
Pressed at 150 lbs on 12" ram or 16.915 lbs
per □ in Surface pressed with rubber pad
Run in regular Solution Hydrate ground fine

Charged	25	m. a.	
Discharged	25	" "	
Charged	25	" "	1½ Hour
Discharged	50	" "	
Charged	25	" "	1. Hour
Discharged	100	" "	
Charged	25	" "	1. Hour
Discharged	150	" "	
Charged	25	" "	1. Hour
Discharged	200	" "	
Charged	25	" "	1½ Hour
Discharged	200	" "	

C35

18 Ni Hydrate # 1256

Fine perforated stock Burs not ground off
Burs outside weight of pocket 1320
weight of Ni Hydrate 1 gram moist pressed
Thickness pocket .038
Pressed at 150 lbs on 12" square or 16,965 lbs
per □ in Surface pressed with rubber pad
Run in regular Solution Hydrate ground fine

Charged	25	m.a.	
Discharged	25	" "	
Charged	25	" "	1. Hour
Discharged	50	" "	
Charged	25	" "	1. Hour
Discharged	100	" "	
Charged	25	" "	1. Hour
Discharged	150	" "	
Charged	25	" "	1. Hour
Discharged	200	" "	
Charged	25	" "	1. Hour
Discharged	200	" "	

#19 Duplicate of # 13

weight of pocket 1.320 grams
" " Hydrate ground fine 1. gram
Thickness of pocket .038

Charged	25	m.a.		
Discharged	25	"	"	
Charged	25	"	"	1. Hour
Discharged	50	"	"	
Charged	25	"	"	1. Hour
Discharged	100	"	"	
Charged	25	"	"	1. Hour
Discharged	150	"	"	
Charged	25	"	"	1. Hour
Discharged	200	"	"	
Charged	25	"	"	1. Hour
Discharged	200	"	"	

#20 Dulicate of # 13

weight of pocket 1.320 grams
" " Hydrate ground fine 1 gram
Thickness of pocket .038

Charged	25	m.a.	
Discharged	25	" "	
Charged	25	" "	1. Hour
Discharged	50	" "	
Charged	25	" "	1. Hour
Discharged	100	" "	
Charged	25	" "	1. Hour
Discharged	150	" "	
Charged	25	" "	1. Hour
Discharged	200	" "	
Charged	25	" "	1. Hour
Discharged	200	" "	

#21 Duplicate of # 13 Except used
#1256 Hydrate ground fine

Weight of pocket	1.330	grams
Weight of Hydrate	1.	"
Thickness of pocket	.036	

Charged	25	m. a.	
Discharged	25	" "	
Charged	25	" "	1. Hour
Discharged	50	" "	
Charged	25	" "	1. Hour
Discharged	100	" "	
Charged	25	" "	1. Hour
Discharged	150	" "	
Charged	25	" "	1. Hour
Discharged	200	" "	
Charged	25	" "	1. Hour
Discharged	200	" "	

#22 Duplicate of #13 except used
#1256 Hydrate ground fine

weight of pocket		1.290 grams
" " Hydrate		1. gram
Thickness of pocket	.038	

Charged	25	m.a.	
Discharged	25	" "	
Charged	25	" "	1. Hour
Discharged	50	" "	
Charged	25	" "	1. Hour
Discharged	100	" "	
Charged	25	" "	1. Hour
Discharged	150	" "	
Charged	25	" "	1. Hour
Discharged	200	" "	
Charged	25	" "	1. Hour
Discharged	200	" "	

23 Duplicate of # 13 Except Hydrate not ground same as used in making regular tubes

Weight of pocket		1.350 grams
" " Hydrate		1. "
Thickness of pocket	.038	

Charged	25	ma.	
Discharged	25	" "	
Charged	25	" "	1. Hour
Discharged	50	" "	
Charged	25	" "	1. Hour
Discharged	100	" "	
Charged	25	" "	1. Hour
Discharged	150	" "	
Charged	25	" "	1. Hour
Discharged	200	" "	
Charged	25	" "	1. Hour
Discharged	200	" "	

24 Duplicate of #13 Except Hydrate not ground same as used in makeing regular tubes

Weight of pocket	1.300	grams
" " Hydrate	1.	"
Thickness of pocket	.039	

Charged	25	m.a.	
Discharged	25	" "	
Charged	25	" "	1. Hour
Discharged	50	" "	
Charged	25	" "	1. Hour
Discharged	100	" "	
Charged	25	" "	1. Hour
Discharged	100	" "	
Charged	25	" "	1. Hour
Discharged	200	" "	
Charged	25	" "	1. Hour
Discharged	200	" "	

#1256

25 Duplicate of #13 except Hydrate not ground
same as used in making regular tubes

Weight of pocket		1.320 grams
" " Hydrate		1. "
Thickness of pocket	.039	

Charged	25	m.a.	
Discharged	25	" "	
Charged	25	" "	1. Hour
Discharged	50	" "	
Charged	25	" "	1. Hour
Discharged	100	" "	
Charged	25	" "	1. Hour
Discharged	150	" "	
Charged	25	" "	1. Hour
Discharged	200	" "	
Charged	25	" "	1. Hour
Discharged	200	" "	

CSU

26 Duplicate of # 13 Except Hydrate #1256
not ground same as used in making regular tubes

Weight of pocket		1,330 grams
" " Hydrate		1. "
Thickness of pocket	.039	

Charged	25	m.a.	
Discharged	25	" "	
Charged	25	" "	1. Hour
Discharged	50	" "	
Charged	25	" "	1. Hour
Discharged	100	" "	
Charged	25	" "	1. Hour
Discharged	150	" "	
Charged	25	" "	1. Hour
Discharged	200	" "	
Charged	25	" "	1. Hour
Discharged	200	" "	

Polishing Compound for Records

#1. 25 grms powder in tin can 1. C.C Glycerine used Screw press 4 per cent N.G.

#2. 25 grms powder in tin can 2.C.C. Glycerine 100 lbs Hydrolic press 8 per cent N.G.

#3. 25 grms powder in tin can 3.C.C. Glycerine 100 lbs Hydrolic press 12 per cent N.G.

#4. Same as #1 except 50 lbs on press N.G.

#5. Same as #1 Except 50 lbs on press

#6, 7, & 8 Same as #1, 2, + 3 except 25 lbs on Hydrolic press

#9. 15 grms of Electro Silicon + 14 grms common soap 25 lbs press

Polishing Compounds for Records

#10 Took their regular polishing Compound dissolved out the tallow then mixed with Common Soap 25 grains of this powder 12½ grams Soap No 9.

Soap does not charge the wheel

[ITEM(S) FOUND IN BOOK]

11/20/

C 1 [illegible]
D 1 min 16 Seconds
C 1 [illegible]
200 ma D 1 min 15 Seconds
75 ma C 1 Hour
200 ma D 1 min 15 Seconds

C 5 milliamps / Square inch of Surface
D " " " /

C 310 — 410 1 Hour
D 411 — 428 17 min
C
D

$\frac{3}{9^5}$ —

28
11
17

235 — 255
D 25 3 or

$\frac{4}{7}$

[ITEM(S) FOUND IN BOOK]

1152

One square inch surface with .500 gram of NO solution heated at 350 in Hydrolic press [illegible] ram

Charged at 10 milliamps

C 10 54 — 11 18 20 min

11 19 — 11 20 [illegible]

25 — 12 54

1 — 1 19 5 190 minutes

40 17

8"

25
4
5.00 5 100
20

1.00

D 11 50

8 mil amp for 5 min

25 min. 1190

Discharged - 25 "

4 C. 7 53 — 8 23 — [illegible]

D. 844 — 859 — 15 min 75 ma 5 min

5 C. 9 00 — 10 00 1 Hour

D. 10 00 — 10 22 — 2 min 101 ma. 5 min

6 C 10 25 — 11 25 —

D 11 26 — 11 50 — 24 min 100 ma 5 min

26
5 4
20

[ITEM(S) FOUND IN BOOK]

5 milli amps Charge
5 " " Discharge

C 10[illegible] — 10[illegible] 20 min
D 10[illegible] — 11[illegible] 13 min 15 Seconds
C 11[illegible] — 11[illegible] 20 min
D 11[illegible] — 11[illegible] 14 min 15 Seconds

V 171

55 171
56 [illegible]
57 [illegible]
58 [illegible]
59 [illegible]
60 [illegible]

C. 820 — 830 10 min
D. 830 — 833 15s 3½ minutes
C. 835 — 845 10 min
D. 846 — 851 30.s 5 min 30 sec
C. 853 — 903 10 minutes
D. 904 — 910 30.s 6 minute 30 s
C. 912 — 922 10 min
D. 923 — 931 15.s 8 min 15 seconds
C. 935 — 945 10 min
D. 955 — 11 05 5 min [illegible]
C. 1005 — 1015 10 min
D. 1016 — 1024 30.s 8 min 30

The deposited in the bottom of glass came out in the first two Charges + Discharges

[ITEM(S) FOUND IN BOOK]

N. 1256

25 mg	C	8 50	— 8 50	
25 mg	D	8 51	— 9 19	
50 mg	C	9 20	— 9 45	
100 mg	D	9 40	— 9 19	
50 mg	C	9 52	— 10 22	
100 mg	D	10 23	— 10 26 30 S	2½ min 70 m.g. 5 min
25 mg	C	10 32	— 11 32	
100 mg	D	11 33	— 11 37 15 S.	4¼ min 85 m.g. 5 min
25 mg	C	1 00	— 2 00	
200 mg	D	2 01	— 2 02	1 min
25 mg	C	2 05	— 3 05	1 Hour
300 mg	D	3 06	3 06 30 S.	½ min
25 mg	C	3 10	4 10	
	D			

[ITEM(S) FOUND IN BOOK]

#7 12/1/14

Hydrate # 731

10 C ½ Hour

25 C [illegible] [illegible] [illegible] 1 Hour

150 D 4[illegible] 4[illegible] 5 min 30 Seconds

25 C 4[illegible] — 5[illegible] 1 Hour

150 D 5[illegible] 5[illegible] 30.S. 2 min 30 Seconds

25 C 9[illegible] — 9[illegible] 1 Hour

150 D 9[illegible] 9[illegible] 1. min

25 C 9[illegible] 10[illegible] 1 Hour

150 D 10[illegible] 10[illegible] 30.S. 30 Seconds

25 C 10[illegible] 11[illegible] 1 Hour

200 D 11[illegible] 11[illegible] 20.S. 20 Seconds

25 C 11[illegible] — 10[illegible] 1½ Hour

200 D 10[illegible] 10[illegible] 20.S. 20 Second

25 C 10[illegible] — 20[illegible] 1 Hour

200 D 209 — 209 20.S. 20 Seconds

Quite little sediment in bottom glass.

#8 12/1/14

Hydrate #731

10 C ½ Hour

25 D [illegible] [illegible] [illegible]

25 C 3[illegible] 4[illegible] 1 Hour

25 D 4[illegible] 4[illegible] 4 min 30 Seconds

25 C 4[illegible] — 5[illegible] 1 Hour

150 D 5[illegible] 5[illegible] 2 min

25 C 9[illegible] 9[illegible] 1 Hour

150 D 9[illegible] 9[illegible] 1 min

25 C 9[illegible] 10[illegible] 1 Hour

150 D 10[illegible] 10[illegible] 30.S. 30 Seconds

25 C 10[illegible] 11[illegible] 1 Hour

200 D 11[illegible] 11[illegible] 25.S. 25 Seconds

25 C 11[illegible] — 110 1

200 D 111 — 111 20.S. 20 Seconds

25 C 112 — 212 1 Hour

200 D 213 — 213 20.S. 20 Seconds

Quite little sediment in bottom of glass

[ITEM(S) FOUND IN BOOK]

Suite title Settlement [illegible]

23

133

[ITEM(S) FOUND IN BOOK]

~~#~~ 9 12/2/14

Ni Hydrate ~~#~~ 731

Separated stock Burs not ground off
Burs inside weight of packet 1.310 grains
weight of Ni Hydrate 500 grains
thickness of packet .021 moist pressed
Pressed at 150 lb on 12" ram or 16.965 lbs
per □ inch Surface pressed with rubber pad

10 C			15 Hours
10 D	9 31	— 10 50	1 Hour 19 min
15 C	10 51	— 11 51	1 Hour
25 D	11 52	12 19	27 min
25 C	12 21	1 21	1 Hour
50 D	1 22	— 1 35	12 min
25 C	1 36	— 2 36	1. Hour
100 D	2 37	— 2 42	5 min
25 C	2 43	— 3 43	1 Hour
150 D	3 44	3 47	3 min
25 C	3 48	4 48	1 Hour
200 D	4 49	4 50 50 S.	1 min 50 Seconds
25 C			
200 D			

~~#~~ 10

Ni Hydrate # 731

Ether separated stock Burs not ground off
Burs outside weight of packet 1.320 grains
weight of Ni Hydrate 500 grains
thickness of packet .026 moist pressed
Pressed at 150 lbs on 12" ram or 16.965 lbs
per □ inch of Surface pressed with rubber pad.

10 C			15 Hours
10 D	8 08	— 9 38	1½ Hour
15 C	9 42	— 10 42	1. Hour
25 D	10 43	— 11 10	27 min
25 C	11 11	— 12 11	1. Hour
50 D	12 22	— 12 34 30 S.	12½ min
25 C	12 36	— 1 36	1. Hour
100 D	1 37	— 1 42	5 min
25 C	1 44	— 2 44	1. Hour
150 D	2 45	2 48	3. min
25 C	2 49	3 49	1 Hour
200 D	3 50	3 51½	1½ min
25 C			
200 D			

[ITEM(S) FOUND IN BOOK]

#11 12/3/14

Ni Hydrate #1256

Fine perforated stock. Burs not ground off

Burs inside weight of pocket 1.330

weight of Ni Hydrate .500 grms

Thickness of pocket .022

Pressed at 150 lbs on 12" ram or 16.965 lbs per □ in Surface pressed with rubber pad

10 C			14 Hours
15 D	7 20	— 8 55	— 35 min
15 C	7 57	— 8 57	— 1 Hour
25 D	8 58	— 9 18	— 20 min
25 C	9 20	— 10 20	— 1. Hour
50 D	10 21	— 10 30	— 9. min
25 C	10 31	— 11 31	— 1. Hour
100 D	11 32	— 11 35 3/4	— 3 3/4 min
25 C	11 40	— 12 40	— 1 Hour
150 D	12 41	— 12 43	2 min
25 C	12 45	— 1 45	1 Hour
200 D	1 46	— 1 47 1/4	1 1/4 min

#12 12/3/14

Ni Hydrate #1256

Fine perforated stock Burs not ground off

Burs outside weight of pocket 1.310 grms

weight of Ni Hydrate .500 grms

Thickness of pocket .021

Pressed at 150 lbs on 12" ram or 16.965 lbs per □ in Surface pressed with rubber pad

10 C			14 Hours
15 D	7 35	— 7 58	— 23 min
15 C	8 00	— 9 00	— 1 Hour
25 D	9 10	— 9 25	— 15 min
25 C	9 28	— 10 28	— 1 Hours
50 D	10 32	— 10 40	— 8 min
25 C	10 41	— 11 41	— 1 Hour
100 D	11 42	11 44 1/2	— 2 1/2 min
25 C	11 46	— 12 46	— 1 Hour
150 D	12 47	— 12 48 3/4	— 1 3/4 min
25 C	12 50	— 1 50	— 1 Hour
200 D	1 51	— 1 56 1/4	1 1/4 min

1240
149
150

[ITEM(S) FOUND IN BOOK]

#13 12/4/14

Ni Hydrate #731

Fine perforated stock Burs not ground off

Burs outside weight of pocket 1.320 grams

weight of Ni Hydrate 1. gram dry pressed

Thickness of pocket .036

Pressed at 150 lbs on 12" ram or 16.965 lbs

per □ inch of Surface pressed with rubber pad

10 C m.a.	—	14 Hours
15 D	7 35 – 9 52	2 Hours 17 min
15 C	9 53 – 10 53.	1. Hour
25 D	10 54 – 11 35	41 min
25 C	11 37 – 12 37	1. Hour
50 D	12 38 – 1 05	28 min
25 C	1 06 – 2 06	1. Hour
100 D	2 07 – 2 19¼	12¼ min
25 C	2 21 – 3 21	1. Hour
150 D	3 23 – 3 30½	7½ min
25 C	3 32 – 4 32	1. Hour
200 D	4 33 – 4 38 10	5 min 10 Seconds

#14 12/4/14

Ni Hydrate #731

Fine perforated stock Burs not ground off

Burs outside weight of pocket 1.330 grams

weight Ni Hydrate 1. gram pressed moist

Thickness of pocket .037

Pressed at 150 lbs on 12" ram or 16.965 lbs

per □ in Surface pressed with rubber pad

10 C		14 Hours
15 D	7 45 – 9 35	1 Hour 50 min
15 C	9 40 – 1 40	1. Hour
25 D	10 41 – 11 20	39 min
25 C	11 22 – 12 22	1. Hour
50 D	12 23 – 12 47	24 min
25 C	12 48 – 1 48	1. Hour
100 D	1 49 – 1 59½	10½ min
25 C	2 01 – 3 01	1. Hour
150 D	3 02 – 3 08¼	6¼ min
25 C	3 10 – 4 10	1. Hour
200 D	4 11 – 4 15 10 S.	4 min 10 Seconds

[ITEM(S) FOUND IN BOOK]

#15

25 C		14 Hours
25 D	8 21 — 9 02	41 min
25 C	9 04 — 10 04	1. Hour
50 D	10 05 — 10 24	19 min
25 C	10 25 — 11 25	1. Hour
100 D	11 26 — 11 34	8. min
25 C	11 35 — 12 35	1. Hour
150 D	12 36 — 12 40 36	4½ min
25 C	12 42 — 1 42	1 Hour
200 D	1 43 — 1 46	3. min
25 C	1 47 — 2 47	1. Hour
200 D	2 48 2 51 155.	3¼ min

#16

25 C		14 Hours
25 D	8 23 — 8 54	31 min
25 C	8 56 — 9 56	1. Hour
50 D	9 57 — 10 10	13 min
25 C	10 11 — 11 11	1. Hour
100 D	11 12 — 11 17	5. min
25 C	11 19 — 12 19	1. Hour
150 D	12 20 — 12 23	3. min
25 C	12 24 — 1 24	1. Hour
200 D	1 25 — 1 27	2. min
25 C	1 28 — 2 28	1. Hour
200 D	2 29 — 2 31	2 min

[ITEM(S) FOUND IN BOOK]

#9015 A		#H1794B		#7274 A		#4346A	
Lenght	wedth	Lenght	width	Lenght	width	Lenght	wedth
.022	.012	.016	.011	.024	.014	.013	.009
.023	.012	.016	.011	.023	.014	.014	.009
.023	.012	.016	.011	.022	.013	.015	.009
.023	.010	.019	.011	.022	.013	.015	.009
.023	.010	.018	.011	.023	.012	.014	.009
.021	.011	.018	.013	.023	.012	.014	.009

#H1786C		#8751A		#8476A	
.018	.012	.023	.011	.023	.011
.017	.011	.023	.012	.023	.011
.016	.010	.023	.013	.023	.011
.017	.010	.023	.013	.023	.013
.017	.010	.023	.013	.024	.012
.017	.010	.023	.013	.024	.012

#2831A		#6445A		#4370 A	
.020	.016	.020	.012	.015	.010
.021	.016	.020	.012	.015	.010
.020	.015	.020	.012	.015	.009
.020	.016	.020	.011	.016	.009
.020	.014	.021	.010	.016	.009
.020	.017	.021	.010	.015	.009

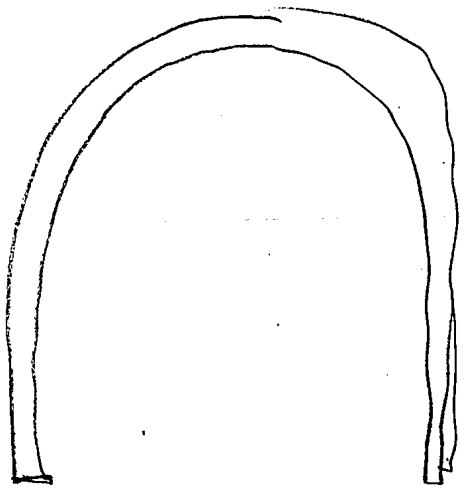
#5606 A		#6601 A		#4976 A	
.023	.012	.020	.011	.020	.014
.021	.012	.022	.011	.021	.014
.020	.013	.022	.011	.022	.014
.020	.012	.020	.011	.022	.014
.021	.013	.020	.012	.020	.013
.021	.012	.021	.011	.020	.012

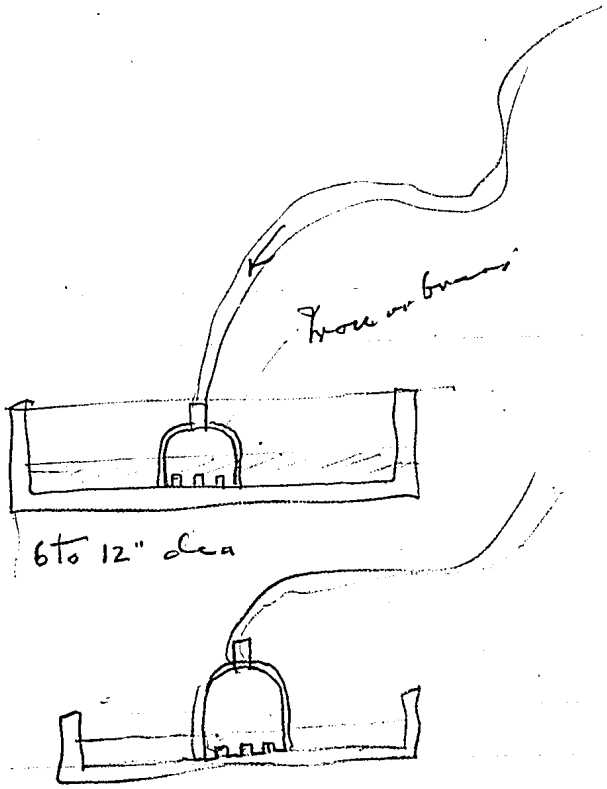
#7394A		#9129A		#3876A	
.020	.009	.024	.012	.015	.011
.020	.009	.024	.012	.015	.011
.019	.009	.022	.012	.017	.011
.019	.010	.023	.012	.017	.011
.020	.011	.023	.012	.017	.011
.019	.010	.022	.012	.016	.012

These Calipers were taken from Sixth of the Drawing

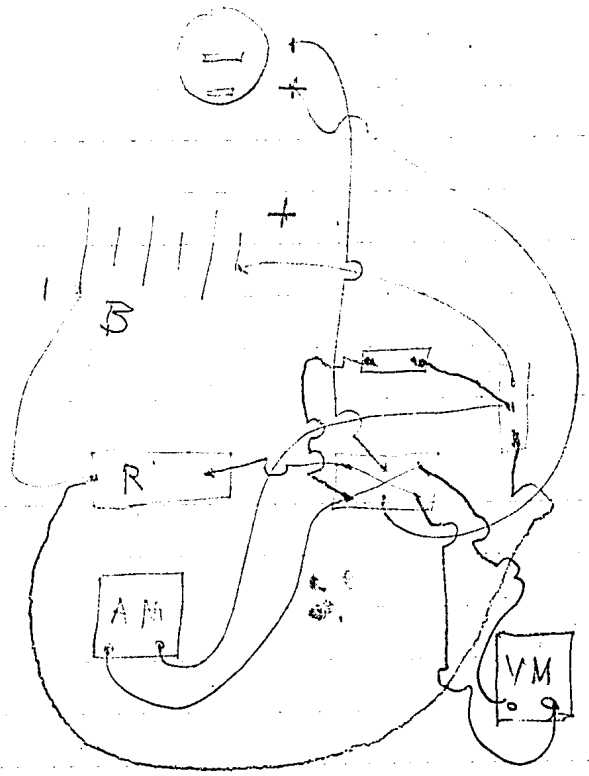
12/8/14

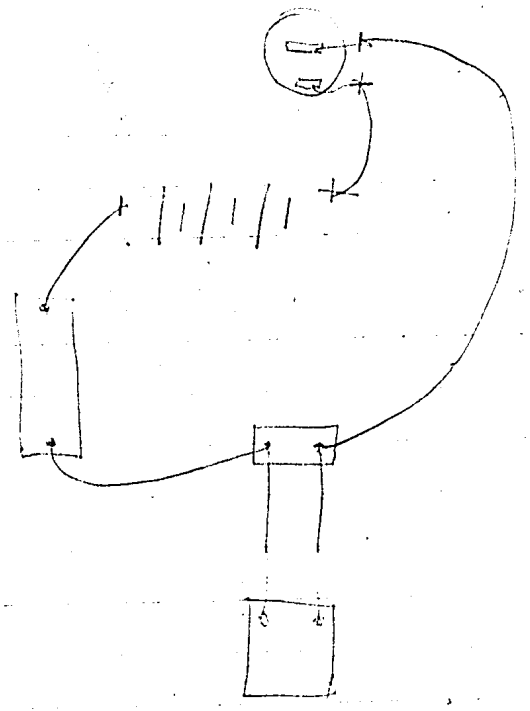
[ITEM(S) FOUND IN BOOK]





[ITEM(S) FOUND IN BOOK]





800
5 | 9400
180

845

[ITEM(S) FOUND IN BOOK]

175 Milamperes for 5 minutes
per inch of surface

[ITEM(S) FOUND IN BOOK]

1 cell

#1
on Dec 22, 1919
at 10.40 A.M.
50 cc 20% Na OH
Williams Drum + 2g
Powdered Brimstone

Take long tube say
1" inside 6" to 7" long
put in NaOH 20%
add about 2 grams
Brimstone + let it ecCle
to bottom — Cork up
the End put it inside

Want to see if Brimstone
will blacken by forming
iron Decplide

M. G.

Sower

[ITEM(S) FOUND IN BOOK]

#2 50 cc 20% No OH
Mellow Drain + 2 drops
of Ba. Sulphide
on 11.20 AM Dec 22.
1919.